IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re	Applicati	ion of: PAIGE	et al						Art Unit:	1627				\subseteq	
Applic	ation No	o.: 09/429,331			Art Unit: 1627 Examiner: T. Wessendorf Weshington D.C.										
Filed:	Octobe	er 28, 1999			Washington, D.C.						27				
For: N	/ETHO	D OF PREDICT	ING THE A	BILITY OF							2				
									Date: Fe	bruary 27,	2001			<u>.</u>	300
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		SIONER OF PA D.C. 20231	ATENTS AN	D TRADEMARKS										 O	ED 300/2860
Sir:															Š
Transı <u>sı</u>	nitted h	erewith is a []	Amendmen e specificati	t [XX] Supplement on page 237; page	al Response to 152 of PCT/US	"Sequene 99/06664	ce Listing 4; copy of	Requirer	ment, revi postcard	ised page receipts	ተዣ 1 <mark>, and ne</mark>	w pag	es 79-90 of S	Sequen	ce Listing;
in the		dentified applica													
				laim small entity st	atus. See 37 C	.F.R. §1.:	27.								
[]		litional fee is rec e has been calcı	•	own below:											
. ,	1110 100	s nas been ealer	uiutou uo ori	ovin polovi.					•						
		(Col. 1)		(Col. 2)	(Col. 3)	, .		SMALL	ENTITY			_ 0	THER THAN	SMAL	LENTITY
		CLAIMS		HIGHEST NO.	PRESENT		RA ⁻	TE ·	ADDIT	IONAL EE	OR		RATE	ADI	DITIONAL FEE
		REMAINING AFTER AMENDMENT		PREVIOUSLY PAID FOR	EXTRA EQUALS				F	==					FEE
TOTA			MINUS	** 20	0		x	9	\$			х	18	\$	
INDEP			MINUS	*** 3	0		x 4	0	\$			x	80	\$	-
FIRST	PRESE	NTATION OF I	MULTIPLE [DEP. CLAIM		J	+ 13		\$			_+_	270	\$ ·	
					,	ADDITIO	NAL FEE	TOTAL [\$		OR		TOTAL	\$	<u> </u>
;xx]	The "Highest Number Previously Paid For" (total or independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment of the number of claims originally filed.														
[] It is	hereby	petitioned for a	ın extension	of time in accordar	nce with 37 CFI	R 1.136(a	a). The ap	propriate	fee requi	red by 37	CFR 1.17	is ca	lculated as s	hown b	elow:
	Small	Entity							mall Entity						
,		nse Filed Within						nse Filed Within First - \$ 110.00							
	[]		\$ 55.00 \$ 195.00				[]	Secon	- \$ d - \$	390.00					
	1 1	Third -	\$ 445.00				i i	Third	- \$	890.00					
	[]	Fourth -	\$ 695.00				[]	Fourth	- \$	1390.00					
	Month	After Time Peri	od Set				Month	After Tim	e Period	Set					
	[]	Less fees (\$) alrea	dy paid for mo	nth(s) extensior	of time	on		·						
[]	Please	charge my Dep	osit Accoun	t No. 02-4035 in the	e amount of \$_		·								
[]	Credit (Card Payment F	orm, PTO-2	2038, is attached, a	uthorizing payn	nent in the	e amount	of \$.							
[]	A chec	k in the amount	of \$	is attach	ed (check no.)										
[XX]	overpay any Ext §1.16 a	yment to Deposi tension of Time	it Account N fee, not cov	orized and requeste to. 02-4035. This a ered by check or sp es under 37 CFR §	uthorization an ecific authoriza	d request ation, but	is not lim is also int	ited to par ended to	yment of a include al	all fees as Il fees for t	sociated the prese	with th ntation	his communi n of extra cla	cation, ims unc	including ler 37 CFR
										BROW	VDY AND	NEIM	IARK		
										Attorne	eys for Ap	plicar	nt(s)		
												1	72	2	

Facsimile: (202) 737-3528 Telephone: (202) 628-5197

Iver P. Cooper Registration No. 28,005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	ART UNIT: 1627
PAIGE et al)	Examiner: T. Wessendorf
Appln. No.: 09/429,331)	Washington, D.C.
Filed: October 28, 1999)))	February 27, 2001 🖶 👸
For: METHOD OF PREDICTING THE ABILITY OF COMPOUNDS TO MODULATE THE BIOLOGICAL ACTIVITY OF RECEPTORS))	Atty.Docket: PAIGE=1D

SUPPLEMENTAL RESPONSE TO "SEQUENCE LISTING" REQUIREMENT

Honorable Commissioner of Patents Washington, D.C. 20231

Sir:

Supplementing the response filed February 20, 2001, please further amend the application as follows:

IN THE SPECIFICATION

At page 162, line 34, replace "K = C or T" with --K = G or T--.

Please replace the present page 237 with the enclosed substitute page, which provides SEQ ID NOs:316-360 for the sequences on this page. If there was no page numbered "237" in the application as filed, please insert this page between pages "236" and "238".

The enclosed "Sequence Listing" pages 1 and 79-90 replace pages 1 and 79 of the "Sequence Listing" submitted February 20, 2001.

REMARKS

1. At the time the February 20, 2001, response was prepared, counsel's file copy of the specification was missing page 237. Hence, the sequences appearing on that page were not incorporated into the Sequence Listing filed on that date.

Since counsel received a postcard receipt (copy enclosed) acknowledging the filing of a 293 page specification, counsel assumes that page 237 was missing only from counsel's file copy and not from the original filed with the PTO.

If counsel is mistaken, inserting page 237 at this time does not constitute the addition of "new matter". At page 1, lines 3-10, it is stated:

This application is a continuation-in-part of PCT/US99/06664, filed March 26, 1999, which is a continuation-in-part of 60/115,345, filed January 8, 1999, which is a continuation-in-part of Paige et al., Serial No. 60/099,656, filed September 9, 1998, which is a continuation-in-part of Paige et al., Serial No. 60/082,756, filed April 23, 1998. All of the above applications are hereby incorporated-by-reference.

Page 237 of this application sets forth Table 1, and part of Table 2. It is identical to page 152 of the above-

identified, incorporated-by-reference PCT application. Hence, even if inadvertently omitted from this application as filed, it can be provided without adding "new matter".

- 2. At page 162, we correct an obvious typographical error in the identification of ambiguous nucleotide "K", which denotes "G" or "T", not "C" or "T". See MPEP \$2422, page 2400-20, Table 1. The NNK codon, specified at page 162, line 33, encodes all 20 amino acids. If the third position were C/T (Y), instead of G/T (K), then Met (ATG), Trp (TGG), Ser (TCA, TCG), Gln (CAA, CAG), Lys (AAA, AAG) and Gly (GAA, GAG) would not be encoded, inconsistent with the identification of X in LXXLL (page 162, line 29) as "any AA".
 - 3. Applicants hereby submit the following:
 - [XX] an amendment to the paper copy of the "Sequence Listing" submitted on February 20, 2001, the amendment being in the form of substitute pages 1 and 79 and new pages 80-90;
 - [XX] the Sequence Listing in computer readable form, complying with \$1.821(e) and \$1.824, including, if an amendment to the paper copy is submitted, all previously submitted data with the amendment incorporated therein;
- [XX] 4. The description has been amended to comply with \$1.821(d).

In re Appln. No. 057429,331

- 5. The undersigned attorney or agent hereby states as follows:
 - (a) this submission is not believed to include new
 matter [\$1.821(g)];
 - (b) the contents of the paper copy (as amended, if applicable) and the computer readable form of the Sequence Listing, are believed to be the same [\$1.821(f) and \$1.825(b)];
 - (c) if the paper copy has been amended, the amendment is believed to be supported by the specification and is not believed to include new matter [§1.825(a)]; and

Respectfully submitted,

BROWDY AND NEIMARK

Attorneys for Applicant(s)

By:

Iver P. Cooper

Registration No. 28,005

IPC:al

624 Ninth Street, N.W. Washington, D.C. 20001

Telephone No.: (202) 628-5197 Facsimile No.: (202) 737-3528 F:\,N\Nova\PaigelD\Pto\SequenceResponse.doc

Enclosures:

Paper Sequence Listing pp. 1,4 and 79-90 Substitute CRF Substitute page 237 Page 152 of PCT/US99/06664 Copy of stamped postcard receipts

FILED: 28 October 1999 APPLICANT(S): PAIGE # 41.	DOCKET NO: PATGE = 10	(Nom)
THE PATENT AND TRADEMARK OFFICE STAMP HEREON ACKNOWLEDGES RECEIPT OF THE ABOVE-IDENTIFIED APPLICATION, INCLUDING THE FOLLOWING PAPERS	0/8	
☐ FEES \$	A SO	
□ RULE 60 DIVISIONAL, WITH: □ COPY OF ORIGINAL APPLICATION (PLANT: PATENT APPLICATION PASSION APPLICATION PLANT: PATENT APPLICATION SHEETS OF DRAWINGS	21 FIG(S)
□ INT'L PCT. APPLN. (pages) □ APPT. OF AGENT: □ FEE CALCULATION SHT	■ TRANSMITTAL LETTER □ PRELIMINARY AMENDMENT: □ SMALL ENTITY STATEMENT(S)	
☐ U.S. NATL PHASE OF INT'L APPLN. (pages)	☐ INFORMATION DISCLOSURE ☐ PRIORITY DOCUMENT(S) ☐ ASSIGNMENT	
B&N-4	LD DECLARATION	6c9

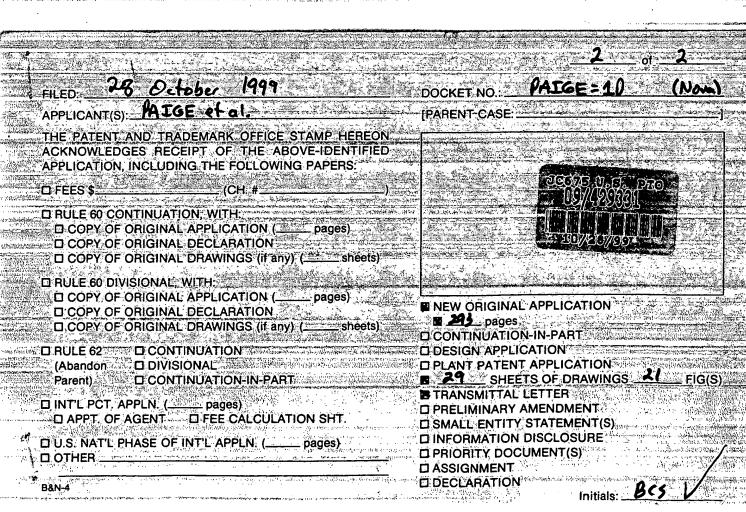


Table 1

Peptides the Bind to the Unliganded (unactivated)
Estrogen Receptor

									Se	qu	ıer	ıce	<u> </u>			SEQ ID NO:	Phage #
5	S	R	W	E	S	P	L	G	Т	W	E	W	S	R		316	4
	S	Α	Α	Ρ	R	Т	I	S	Η	Y	L	M	G	G		317	48
	S	S	W	V	R	L	S	D	F	Ρ	W	G	V	S	R	318	1
	S	S	W	D	R	\mathbf{L}	S	D	F	Ρ	W	G	V	S	R	319	2
	S	S	W	I	R	L	R	D	L	Р	W	G	Ε	S	R	320	3
10	S	S	W	V	L	L	R	D	L	Р	W	G	S	R		321	31
• •	S	S	W	V	V	L	R	D	L	Р	W	G	S	R		322	29
	S	S	C	K	W	Y	Ε	K	C	S	G	\mathbf{L}	W	S	R	323	7
	S	S	G	I	C	F	F	W	D	G	С	F	Ε	S	R	324	35
	S	R	N	L	С	F	F	W	D	D	E	Y	С	S	R	325	41
15	Η	Η	H	R	Η	Р	Α	Η	Ρ	Η	Т	Y	G	G		326	47

Table 2

Peptides that Bind to the Estradiol Activated Receptor

·	Sequence	SER DNO: Phage #
20	SRAGLLSDLLEGKSR	327 1/2
	SSRSLLRDLLMVDSR	328 6
	SSNKLLYNLLKMESR	329 22
	SSKSLLLNLLSTPSR	330 23
	H S F P R E S ⁻ L L V R L L Q G	G 331 42
25	SRLEMLLRSETDFSR	332. 3
	SRLEELLKWGSVTSR	333 11
	SRLEQLLKEEFSYSR	334 21
	SRLEQLLRSEPDFSR	33 5 27
	SRLEDLLRAPFTTSR	336 28
30	SRLESLLRFGQLDSR	337 29
	SSRLLSLLVGDFNSR	338 19/20
	SRLEELLLGTNRDSR	339 30
	SRLKELLLPTDLSR	340 15
2.5	SRLECLLEGRLNCSR	341 34
35	S S K L Y C L L D E S Y C S I	
	S R L S C L L M G F E D C S R S S K L I R L L T S D E E L S	- · •
		R 344 37 R 345 40
	S	346 4
40	S S R L W Q L L A S T D T S R	347 16
40	S S N S M L W K L L A A P S R	348 13/14
	SSKTLWRLLEGERSR	349 17
	S R A G P V L W G L L S E S R	350 32
	S S L T S R D F G S W Y A S R	35 1 5
45	SSWVRLSDFPWGVSR	352 24/25
10	SSEYCFYDSAHCSR	352 33
	SRSLLECHLMGNCSR	354 7
	SSELLRWHLTRDTSR	355 8
	SRLEYWLKWEPGPSR	35% 12
50	SRSDSILWRMLSESR	357 31
	SSKGVLWRMLAEPVS	R 358 38/39
	H S H G P L T L N L L R S S G	G 359 41
	S	360 26

Table 1

Peptides	the	Bind	to	the	Unliganded	(unactivated)
Estrogen Recep	otor					

								Se	ęqι	ıer	ice	<u> </u>			Phage #
5	SR	W	Ε	S	P	L	G	Т	W	E	W	S	R		$-\frac{1}{4}$
	SA	Α	Ρ	R	T	I	S	Н	Y	L	Μ	G	G		4.8
÷	S S	W	V	R	L	S	D	F	Р	W	G	V	S	R	1
	S S	W	D	R	L	S	D	F	P	W	·G	V	S	R	. 2
	S S	W	I	R	\mathbf{L}	-R	D	L	Р	W	G	Ε	S	R	3
10	S S	W	V	L	L	R	D	\mathbf{L}	Р	W	G	S	R		31
-	S S	W	V	V	L	R	D	\mathbf{L}	Ρ	W	G	S	R		29
	s s	С	K	W	Y	Ε	K	С	S	G	L	W	S	R	7
	S S	G	I	C	F	F	W	D	G	С	F	E	S	R	35
	SR	N	L	С	F	F	W	D	D	Ε	Y	С	S	R	41
15	н н	Η	R	Н	P	Α	Η	Р	Η	T	Y	G	G		47

Table 2

Peptides that Bind to the Estradiol Activated

	Receptor	•
	Sequence	Phage #
20	SRAGLLSDLLEGKSR	1/2
	SSRSLLRDLLMVDSR	6
	SSNKLLYNLLKMESR	22
	SSKSLLLNLLSTPSR	23
	HSFPRESLLVRLLQGG	42
25	SRLEMLLRSETDFŠR	3
	SRLEELLKWGSVTSR	11
	SRLEQLLKEEFSYSR	21
	SRLEQLLRSEPDFSR	- 27
	SRLEDLLRAPFTTSR	28
30	SRLESLLRFGQLDSR	29
	SSRLLSLLVGDFNSR	19/20
	SRLEELLLGTNRDSR	30
	SRLKELLLPTDLSR	15
	SRLECLLEGRLNCSR	34
35	S S K L Y C L L D E S Y C S R	-35
	SRLSCLLMGFEDCSR	36
•	SSKLIRLLTSDEELSR	37
	SSRLMELLQEGQGWSR	40
	SSNHQSSRĹIEĹLSR	4
40	SSRLWQLLASTDTSR	16
	SSNSMLWKLLAAPSR	13/14
	SSKTLWRLLEGERSR	17
	SRAGPVLWGLLSESR	32
	SSLTSRDFGSWYASR	5
45	SSWVRLSDFPWGVSR	24/25
	SSEYCFYDSAHCSR	. 33
	SRSLLECHLMGNCSR	7
	SSELLRWHLTRDTSR	8
	SRLEYWLKWEPGPSR	12
50	SRSDSILWRMLSESR	31
	SSKGVLWRMLAEPVS-R	. 38/39
	HSHGPLTLNLLRSSGG	41
-	SSAGGGAPAGSTPSR	26